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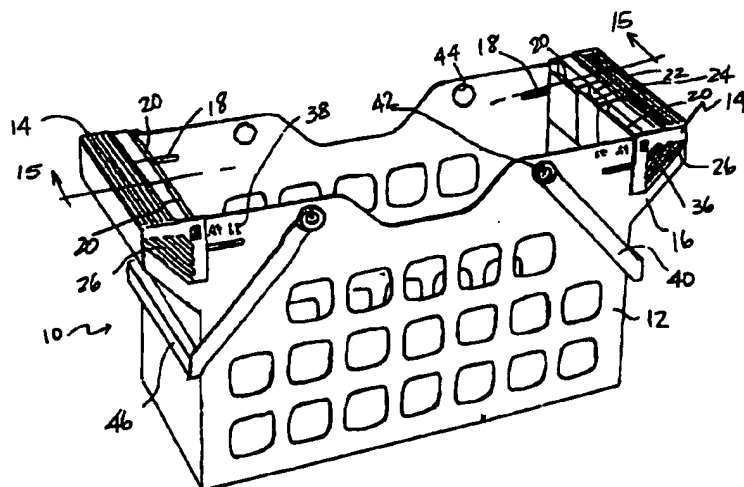
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<p>(21) International Application Number: PCT/CA96/00623 (22) International Filing Date: 18 September 1996 (18.09.96) (30) Priority Data: 60/003,933 18 September 1995 (18.09.95) US (71)(72) Applicants and Inventors: SCHER, Menachem [CA/IL]; 9 Zahal Street, Zichron Yacov (IL). MEIR, Ilan, Ben [IL/IL]; 23 Armonim Street, Nesher (IL). LISS, Avi [IL/IL]; Alon Street, Tel-Aviv (IL). ANDERMAN, Hanan [IL/IL]; 10 Simtat Aharon, Haifa (IL). (74) Agent: MCMAHON, Eileen; Deeth Williams Wall, Suite 400, 150 York Street, Toronto, Ontario M5H 3S5 (CA).</p>		<p>(81) Designated States: CA, IL, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i></p>

(54) Title: **PORTABLE ADJUSTABLE FILING BOX**



(57) Abstract

A portable filing box (10) having an adjustment feature to easily accommodate hanging files of different sizes. The filing box (10) comprises rail members (14) slidably mounted on opposing walls of the box that are movable inward and outward to adjust the distance therebetween and thus enabling hanging files of different lengths to be suspended from the rail members (14). The outermost positions of the rail members (14) correspond to the longest file size that can be suspended in the filing box, and movement of the rail members inward allows for shorter files to be suspended. Horizontal slots are provided in the box on the side walls which do not bear the rail members, and the rail members are assembled to the filing box (10) by engaging tabs which are inserted into the slots to provide a sliding tab mechanism. At least one of the rail members also includes a pivotable drawer portion which is normally flush with the main rail of the rail member (14), but can be pivoted further inward to receive the hook end of a hanging file that is shorter than the other files retained in the filing box (10).

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TITLE: PORTABLE ADJUSTABLE FILING BOX

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PORTABLE ADJUSTABLE FILING BOX

FIELD OF THE INVENTION

5 The present invention relates to a portable, self-contained receptacle for storing and carrying files, and particularly to a hanging file holder with adjustable suspension rails which are moveable to accommodate hanging files of variable size.

BACKGROUND OF THE INVENTION

10 In the increasingly international business arena, one of the difficulties of document handling is the variety of different sizes of standard business paper that is exchanged. In most of the world where the metric system is used, the standard paper size for business documents is commonly referred to as "A4" which measures 210mm by 297mm (or approximately 8.27" by 11.69"). In the English system countries, there are two sizes of paper used for business and legal documents, letter size which measures 8.5" by 11.0" and legal size which
15 measures 8.5" by 14.0". In addition to these, there are countries which use "folio" and "full scape" sizes as well. With each standard size of paper also comes an array of document organizing and handling peripherals such as file folders which are sized to correspond to the paper. Thus, the problem arises in

the exchange of papers because, for example, a filing system proportioned for the A4 paper standard cannot easily accommodate legal sized documents.

5 A widely accepted document organization system centers around hanging file folders which include suspension elements that are supported on rails allowing the file folders to be slid along the rails. When hanging files must be moved or carried, accommodating differently sized papers and their file folders is frustrating and awkward with conventional file carriers and boxes. There exists a need for a portable hanging file box that can be readily adjusted to accept file folders corresponding to the standard paper sizes used around the world.

10 SUMMARY OF THE INVENTION

The present invention pertains to a portable filing box that has an adjustment feature to easily accommodate hanging files of different sizes. Specifically, the filing box comprises rail members disposed at opposite ends of the box which are movable inward and outward to adjust the distance therebetween thus enabling hanging files of different lengths to be suspended from the rail members.

15 In accordance with the present invention, the filing box is formed with shoulders on opposing side walls which each bear a movable rail member adapted to receive the hook ends of hanging files to thereby suspend the files. The rail members are movable inward toward each other, and outward away from each other. The outermost positions of the rail members correspond to the longest file size that can be suspended in the filing box, and movement of the rail members inward allows for shorter files to be suspended. The filing box includes horizontal

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slots formed in the box on the opposing side walls which do not bear the rail members. The rail members are assembled to the filing box by engaging tabs which are inserted into the slots to provide a sliding tab mechanism. The rail members are thus guided and limited by the slots in the filing box. At least one of the rail members also includes a pivotable drawer portion which is normally flush with the main rail of the rail member, but can be pivoted further inward to receive the hook end of a hanging file that is shorter than the other files retained in the filing box.

At least one of the movable rail members also comprises a window through which a symbol or numbers that are imprinted on the body of the filing box is visible to serve as a paper/file size indicator. A series of such symbols or numbers can be imprinted on the filing box so that the position of the rail member causes the correct size to be indicated in the window. To enhance the portability of the filing box, it is provided with bucket-type handles that are pivotally mounted to the side walls. The handles move from a rest position in which they do not interfere with document handling and filing, to a carrying position in which they come together to provide an ergonomic gripping area. In addition, the shoulders of the filing box may comprise attachment features for attaching a carrying strap to the box.

These and other features and advantages of the invention may be more completely understood from the following detailed description of the preferred embodiment of the invention with reference to the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a portable adjustable filing box in accordance with the present invention.

FIG. 2 is a side elevational view of the filing box of FIG. 1.

5 FIG. 3 is a detailed perspective view of one end of the filing box and the movable rail member of FIG. 1.

FIG. 4 is a detailed perspective view similar to FIG. 3 but showing hanging files suspended therein.

FIG. 5 is a top plan view of a movable rail member.

10 FIG. 6 is a front elevational view of the rail member of FIG. 5.

FIG. 7 is a side elevational view of the rail member of FIG. 5.

FIG. 8 is a top plan view of a pivotable drawer.

FIG. 9 is a front elevational view of the pivotable drawer of FIG. 8.

FIG. 10 is a side elevational view of the pivotable drawer of FIG. 8.

15 FIG. 11 is a top plan view of a movable rail member with a pivotable drawer assembled thereon.

FIG. 12 is a front elevational view of the rail member and drawer assembly of FIG. 11.

20 FIG. 13 is a side elevational view of the rail member and drawer assembly of FIG. 11.

FIG. 14 is a cross-section taken along line 14-14 of FIG. 6.

FIG. 15 is cross-sectional view taken along line 15-15 of FIG. 1.

FIG. 16 is a detailed cross sectional view of the shoulder area of FIG. 15.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to FIGS. 1-4, there is shown a portable adjustable filing box 10 of the present invention which comprises a file holder portion 12 and movable rail members 14 mounted on opposing side walls of the holder. Rail members 14 are identical, and are generally triangular in section and extend across the side wall onto which they are mounted. The top and sides of rail member 14 are shown with a ribbed texture, but of course may be plain surfaces, imprinted with words and symbols or otherwise textured. The side walls of holder 12 having the movable rail members are each provided with a shoulder 16 which echoes the shape of the rail members. Holder 12 includes horizontal slots 18 formed in the walls without rail members in the areas of the shoulders, and near the top edge of holder 12.

Rail members 14 each have a main railing 20 extending thereacross adapted to receive hook ends H of hanging file folders as seen in FIG. 4. Rail members 14 are movable inward toward each other and outward away from each other by virtue of their sliding connection to holder 12. FIGS. 1 and 2 illustrate rail members 14 in their outermost positions which would allow holder 12 to accommodate the longest files that it is designed to handle. FIGS. 3 and 4 illustrate rail members 14 moved inward somewhat for shorter files. In addition to main railing 20, each rail member 14 preferably includes a pivotable drawer 22 with its own drawer railing 24. Pivotable drawer 22 is attached to rail member 14 by a hinge connection.

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The sides of rail members 14 include an integral side plate 26 creating a space between the side plate and the side of the rail member. On the interior of each side plate 26 is formed an engaging tab 28 located so that when rail member 14 is assembled onto holder 12, each side plate 26 is disposed to the exterior of the holder and tab 28 is inserted into a respective one of slots 18. In this manner rail member 14 are assembled onto holder 12, and side plates 26 conceal the workings of engaging tabs 28 within slots 18. Slots 18 are preferably notched to provide positive stops for engaging tabs 28. The stops corresponding to the standard paper/file sizes. The structure of the side plates and engaging tabs are best seen FIGS. 5-7 which illustrate a rail member 14 without pivotable drawer 22 attached. FIG. 14 also illustrates the structure of rail member 14 by depicting the inside surface of side plate 26 on which engaging tab 28 is provided..

FIGS. 8-10 illustrate a pivotable drawer 22 which is unattached to a rail member. Drawer 22 has a trapezoidal shape when viewed from the side, FIG. 10, and includes its railing 24 and hinge knobs 30 which are affixed in indentations (not shown) formed in rail members 14 on surfaces 32, labeled in FIG. 6. Hinge knobs 30 of drawer 22 are preferably hemispherical in shape and when they are assembled into the indentations in rail member 14 as shown in FIGS. 11-13, a hinged connection is made about which drawer 22 can pivot.

When drawer 22 is in its resting position it is flush with rail member 14 so that main railing 20 and drawer railing 24 are aligned as best seen in FIG. 3. Drawer 22 can be pivoted inward in the direction of arrow 34 in order to move drawer railing 24 inward so that shorter hanging files can be suspended therefrom

as best seen in FIG. 4. In this manner, even when rail members 14 are positioned for one file size, drawers 22 can be pivoted inward to accommodate a second file size in filing box 10. Drawers 22 provide another stratum of adjustability to the sliding rail members.

5 Filing box 10 also includes at least one indication device which comprises a window 36 formed in a side plate 26 of a rail member. In the preferred embodiment, symbols or numbers 38 are imprinted or embossed on holder 12 in the area above slot 18 so that only one symbol or number is visible through window 36 for each positive stop of tab 28 in slot 18. Of course the indication
10 device only displays the size of the files suspended on main railing 20.

 Filing box 10 is completely self-contained and includes handles 40 for portability. Handles 40 are of the bucket type and have pin portions 42 which are pivotally inserted into apertures 44 in holder 12 on the same walls as slots 18. Gripping ends 46 of handles 40 are specially shaped so that when they are in their
15 resting position, they rest against the side walls of holder 12 as shown in FIGS. 1 and 2, and remain out of the way so as not to interfere with file handling. When handles 40 are swung into the carrying position, gripping ends 46 come together and their meeting surfaces form an ergonomic bar 48 as shown in broken lines in FIG. 2.

20 Another carrying option for filing box 10 is a longer carrying strap 50, a portion of which is shown in FIG. 15. FIG. 15 illustrates a cross-section of the box through shoulders 16, and FIG. 16 is a detailed view of the cross-section. Each shoulder 16 is supported by a corrugation 52, and at the bottom of each

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corrugation 52 is a notch 54 which is adapted to receive a hook portion 56 of carrying strap 50. FIG. 16 illustrates this relationship in detail. The curved bottom surface of corrugation 52 also provides a comfortable resting place for a user's hands which may grip shoulders 16 of filing box 10.

5 When using filing box 10, both rail members 14 are preferably moved inward or outward as necessary to accommodate hooks H of hanging files since the stop increments of tab 28 and slot 18 are predetermined for the standard paper/file sizes. Of course, in some instances movement of one rail member may be sufficient to adjust the hanging space to the size desired. In the illustrated
10 embodiment, the side walls of holder 12 have a perforated design, but any suitable configuration of the side walls are deemed to be within the scope of the present invention. In addition the tab-slot mechanism of the rail members is a preferred embodiment, and other sliding mechanisms may be used. The hinge connection of the pivotable drawer and rail members described herein is that of a preferred
15 embodiment, and another hinge or pivot connection may be used.

 The above description is that of a preferred embodiment of the invention. Various alterations and changes can be made without departing from the spirit and broader aspects of the invention as set forth in the appended claims.

CLAIMS

1. A portable adjustable filing box for holding and organizing hanging files, said filing box comprising:

a pair of movable rail members slidably mounted to opposing walls of said box, said rail members movable in inward and outward directions to thereby adjust the distance therebetween, each of said movable rail members including a main rail adapted to suspend hanging files therefrom, wherein moving said rail members outward enables suspension of longer hanging files on said main rail, and moving said rail members inward enables suspension of shorter hanging files on said main rail.

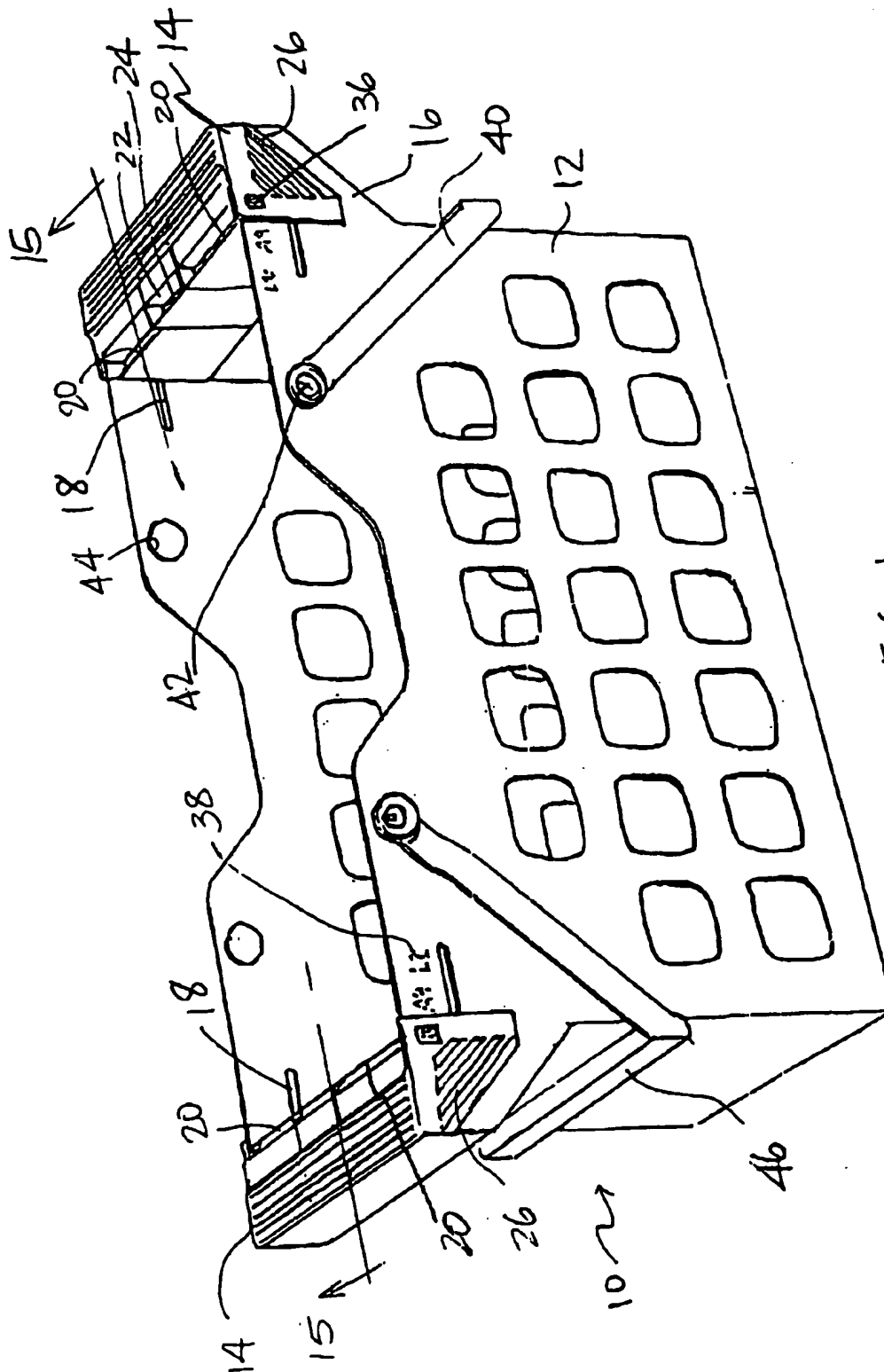


Fig. 1

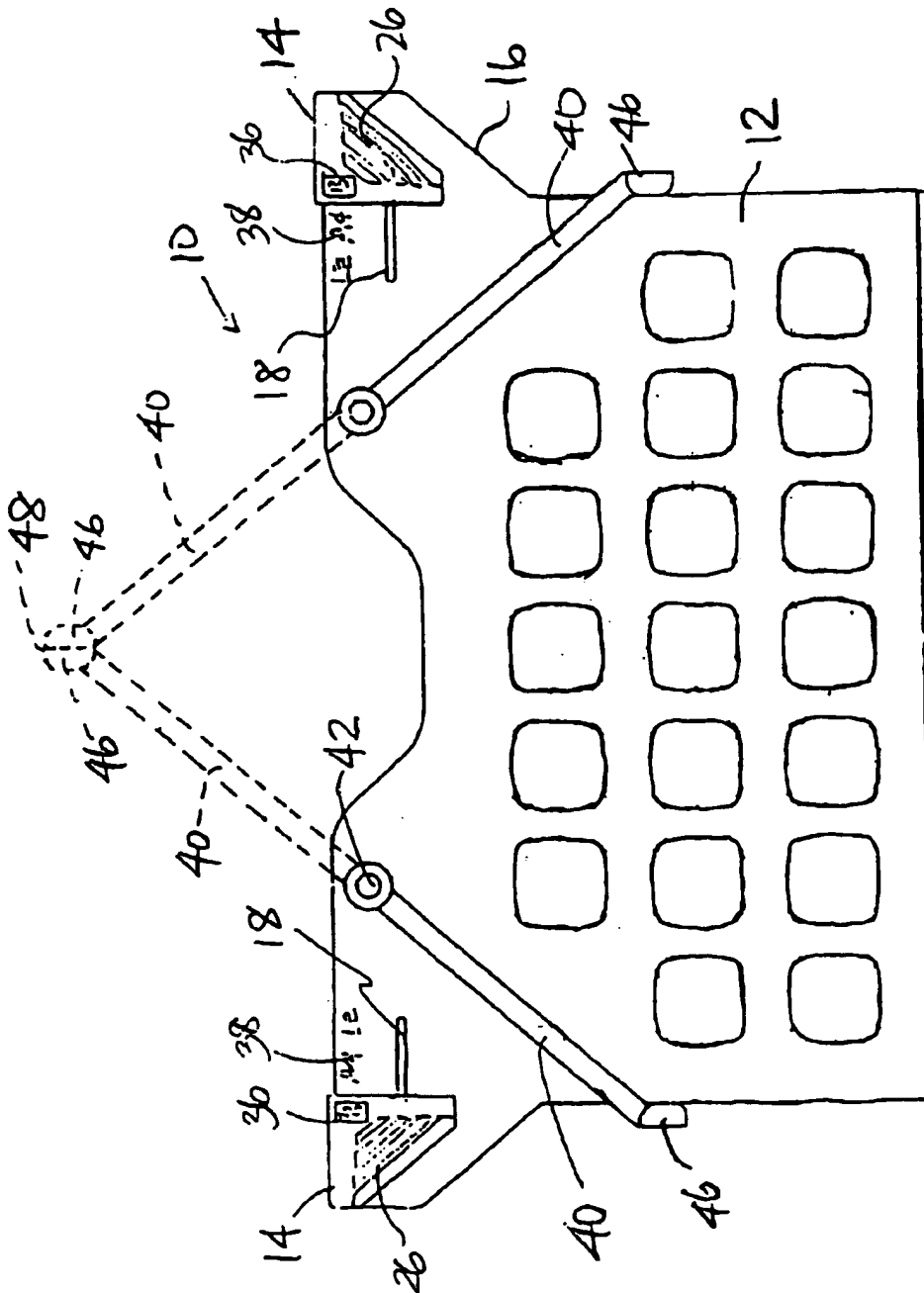
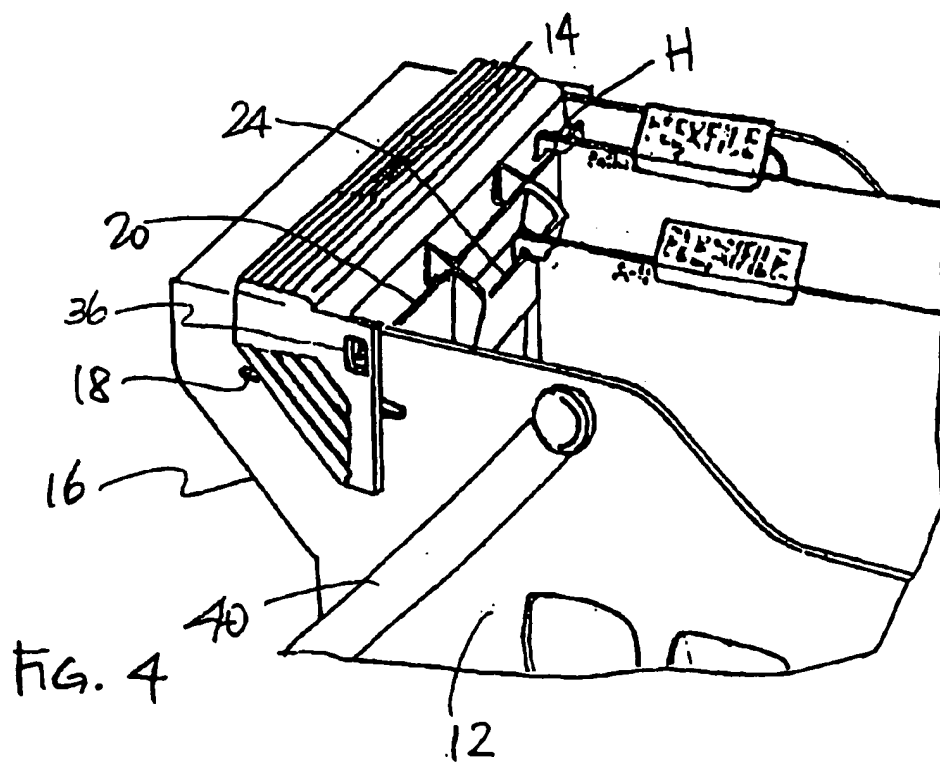
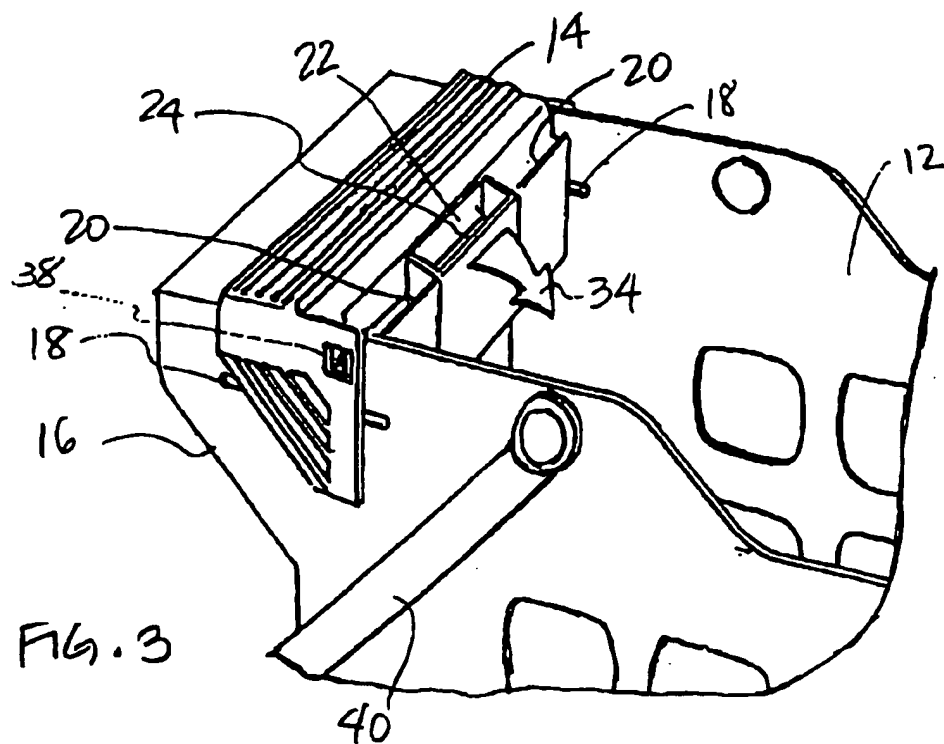
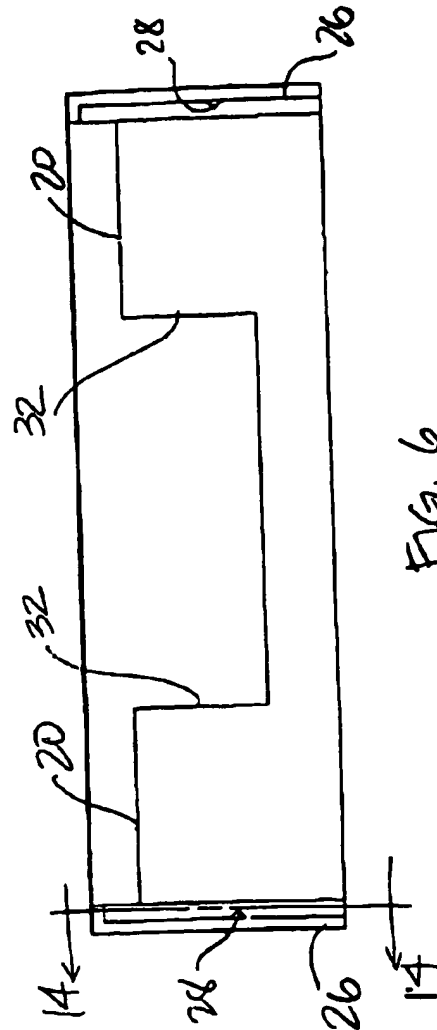
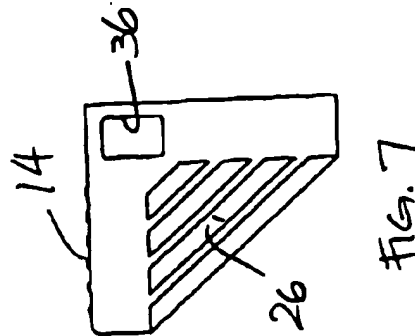
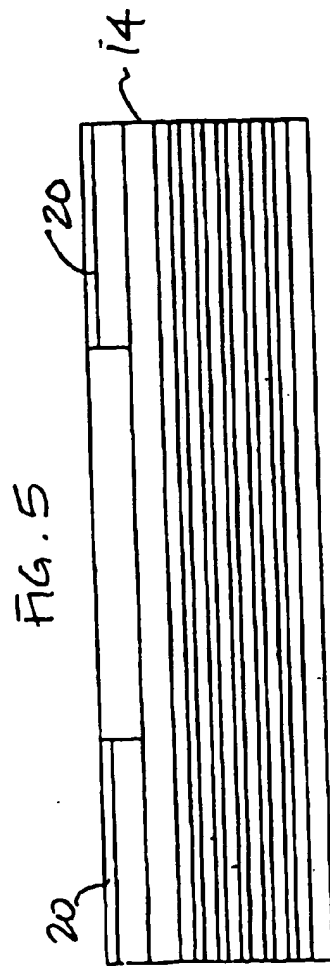


FIG. 2





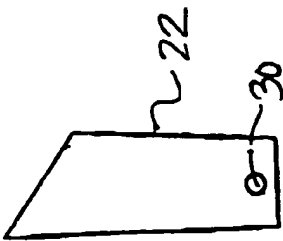
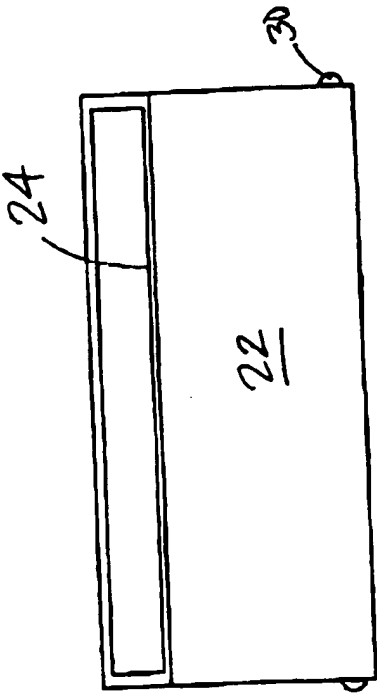
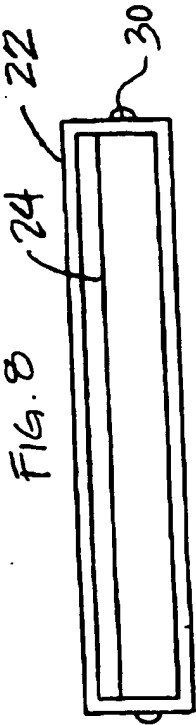
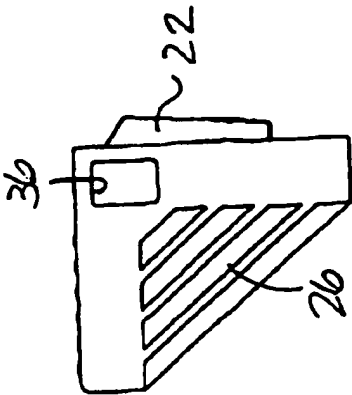
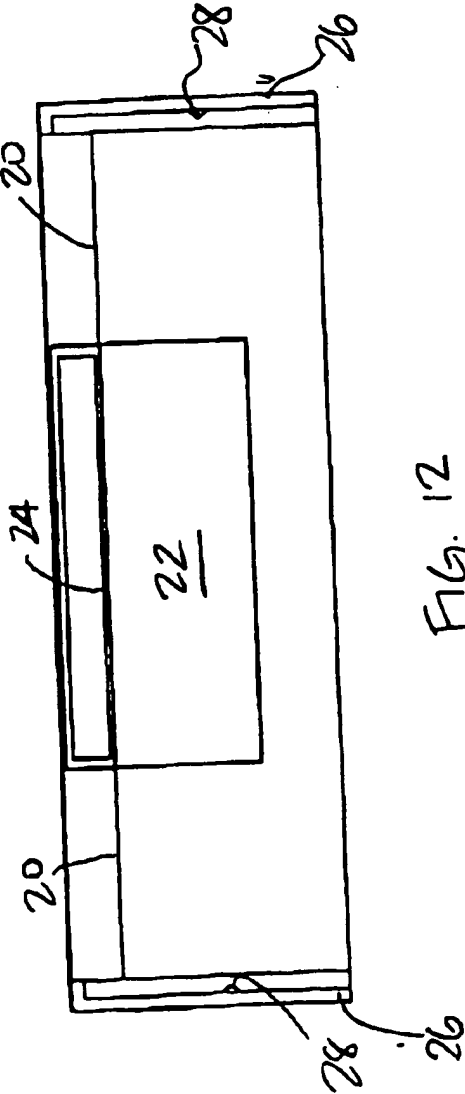
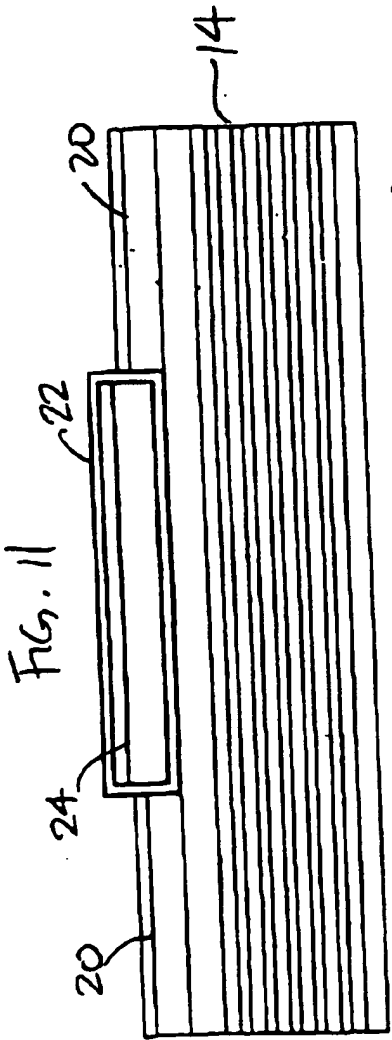


FIG. 10

FIG. 9



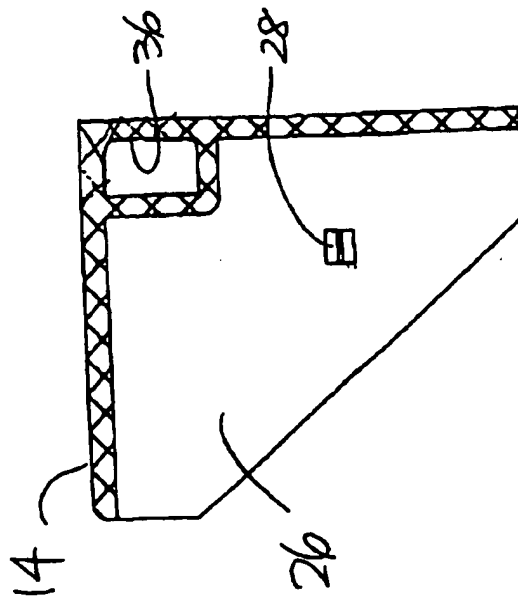


FIG. 14

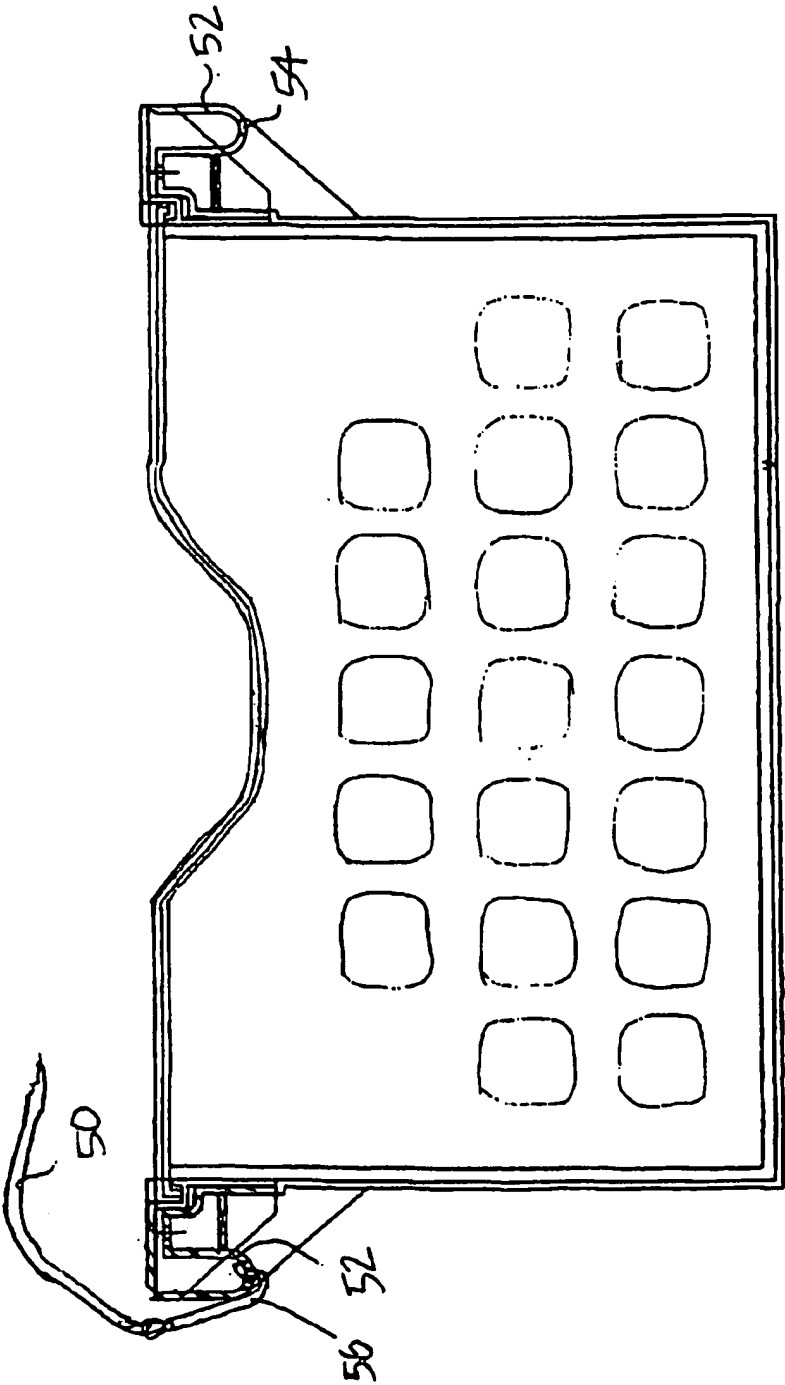


FIG. 15

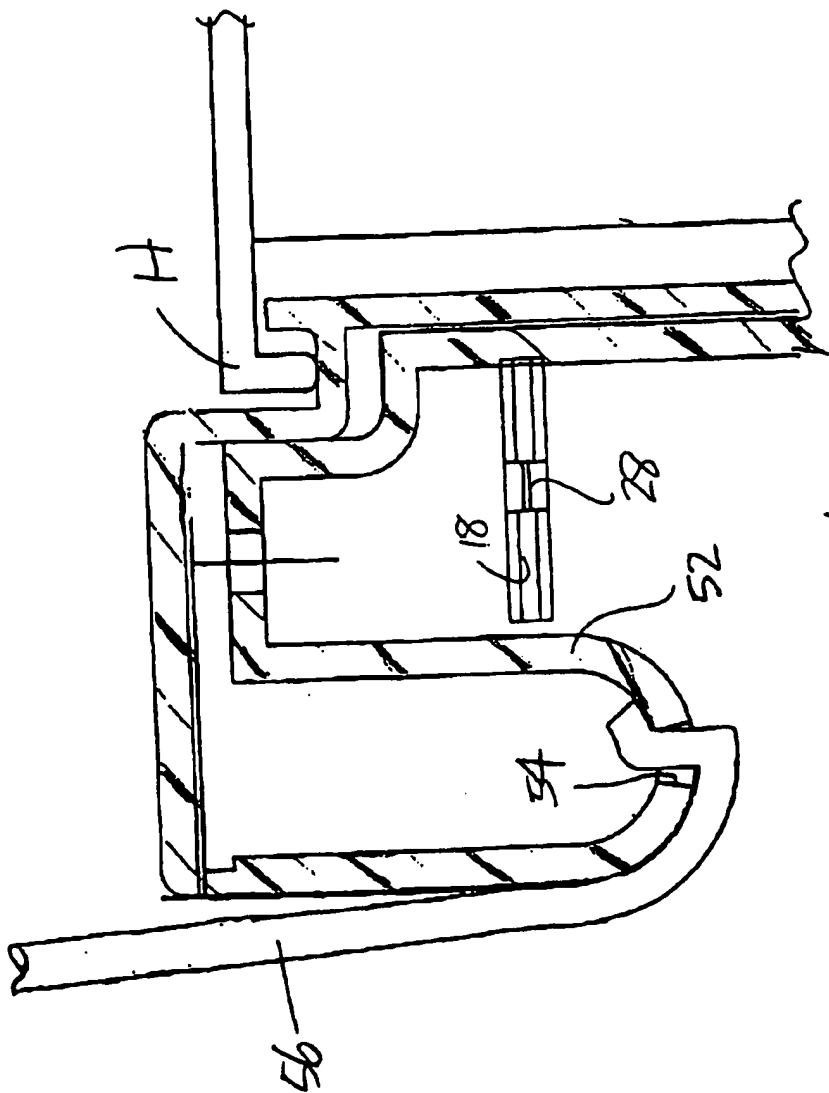


FIG. 16

INTERNATIONAL SEARCH REPORT

International Application No.
PC1/CA 96/00623

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 B42F15/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 B42F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	GB,A,2 179 027 (BLUE BOAR MARKETING AND MANUFACTURING) 25 February 1987 see the whole document ---	1
Y	US,A,3 999 663 (WALTER AND SNOWDEN) 28 December 1976 see column 2, line 4 - line 20; figure 1 ---	1
A	US,A,5 088 801 (RORKE AND BULLWINKLE) 18 February 1992 see column 4, line 1 - line 15; figure 1 -----	1



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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Date of the actual completion of the international search

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Information on patent family members

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GB-A-2179027	25-02-87	NONE	
US-A-3999663	28-12-76	CA-A- 1014032 GB-A- 1482256	19-07-77 10-08-77
US-A-5088801	18-02-92	NONE	